Perceptions of the Peer Evaluation System: Relation with Social Loafing Behaviours

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Abstract

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Amanda Nicholson

An interesting stream of research, which is growing in popularity, attempts to understand the role of social loafing in the successful outcome of group work. The purpose of this thesis was to contribute to this stream of research by exploring the relationship between perceptions of a peer evaluation system and social loafing behaviours. The peer evaluation system was measured in two ways; both the team member's level of awareness of the system and his or her level of perceived importance of the system. This thesis also examined one personality trait in particular; self-monitoring orientation. Through a study conducted among 394 undergraduate students who used the peer evaluation system, results revealed that both a student's level of evaluation awareness and level of perceived importance of the system were unrelated to his or her work quality. Self-monitoring did not have any effect on the relationship between any of the main variables. The correlational design, subject group and certain external factors are some of the limitations in the study. More extensive research effort is called for to distinguish the different effects and consequences of perceptions of peer evaluations.

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INTRODUCTION

The question of how and why some teams working together to achieve a main goal function better than others has received considerable attention in the management literature. The focus on teams and team work has been growing in popularity as organizations are moving towards a more cooperative, cross-functional approach to doing business (Thacker & Yost, 2002). Studies have focused on group characteristics such as team structure (Campion, Medsker, & Higgs, 1993; Stewart & Barrick, 2000), task visibility (George, 1992; Jones, 1984), and individual contributions (Michan & Rodger, 2000). Another interesting stream of research attempts to understand the role of social loafing in the successful outcome of group work (Brutus & Donia, 2010; George, 1992; Harkins & Szymanski, 1989; Jassawalla, Sashittal, & Malshe, 2009). The purpose of this thesis is to contribute to this stream of research by highlighting the importance of individual perceptions of evaluation processes on work quality and performance. In addition, the behaviours and actions that define social loafing will be examined. A recent exploratory study conducted by Jassawalla et al. (2009) found that social loafing behaviours are perceived by group members as two distinct facets; 'poor work quality' which consists of both doing less and doing poorly, and 'engaging in distracting behaviour'.

Research has shown that the overall social loafing behaviour of an individual decreases when his or her performance is being evaluated (Brooks & Ammons, 2003; Harkins & Szymanski, 1989; Karau & Williams, 1993; Weldon & Gargano, 1985). This is because an individual can no longer "hide in the crowd" and expect to receive the same

evaluation as the other team mates. Now the final evaluator will get some insight as to how each member performed and take this into consideration. This proposed research aims to understand the relationship between perceptions of a peer evaluation system and the social loafing behaviours of team members. More specifically, the proposed study will be designed to address the following research question, d*oes how one perceives the peer evaluation system affect their social loafing behaviours?* Are individuals actually improving the quality of their work or are they simply just engaging in less distracting behaviours-or perhaps both?

The main concept for this thesis stems from two main bodies of literature; *why* do individuals social loaf and *how* do they social loaf. The present study assumes that individual behaviour (as evaluated by peers) is influenced by one of two explanations; either they were not aware that they would be evaluated by their peers (evaluation awareness) or they don't feel that the evaluation from their peers is important (perceived importance). As for how individuals social loaf, or put forth less effort, the present study focuses on the two components of social loafing brought forth by Jassawalla et al (2009); either they engage in distracting behaviours or they produce poor quality work by either doing less than expected or doing poorly.

Jassawalla et al. (2009) found that teams compensate and make-up/revise the work of those members who offer poor quality work therefore not letting it affect the success of the final project. On the other hand, they found that team members could not compensate or make up for the members who engaged in distracting and disruptive behaviours, resulting in overall poor team performance. This being said, this study hopes to find that if students know they will be evaluated by their peers and depending on how

important the feedback is to them, they will subconsciously alter their social loafing behaviours which in turn will affect task and contextual performance and the overall performance of the group.

THEORETICAL FOUNDATION

Social Loafing Behaviours

Social loafing is a widely researched construct in social psychology. Over one hundred years ago, Ringelmann was the first to experiment with individual loss of motivation in group work (Karau & Williams, 1993). In a meta-analytic review by Karau and Williams (1993) it has been noted that there has since been over 80 studies on social loafing, both laboratory experiments and field studies.

Social loafing as defined in the literature is a reduction in motivation and or effort by an individual when working in a team as opposed to working alone (Harkins & Szymanski, 1989; George 1992, Karau & Williams 1993). Not to be confused with the free rider mechanism or the 'sucker effect' defined by Orbell and Dawes (1981). Free riding is when an individual reaps the benefits of being in a group (e.g., same project grade) but does not offer a fair share of the work and the sucker effect is when an individual reduces individual effort in order to avoid pulling the weight of a fellow group member who is not performing.

Social loafing is a major issue when it comes to teamwork and there has been an extensive amount of research outlining some of the negative effects it has on overall group performance, group cohesiveness and group satisfaction. As discussed above, Jassawalla et al. (2009) found that groups could not make up for the distracting behaviours of team members and overall grades were negatively affected. Duffy and

Shaw (2000) found that social loafing was negatively related to group cohesiveness, which in turn had an effect on overall performance and group satisfaction.

Other studies have set out to find why social loafing happens at all and whether internal or external factors could prevent social loafing. Such factors include but are not limited to individual characteristics (Morgeson, Reider, & Campion, 2005; Zaccaro, 1984), the nature of the task and the intrinsic motivation of the social loafer (George, 1992), and individualistic values versus collective ones (Earley, 1993). A common finding is that of an individual feeling that if they "slack off" others will simply make up for this lost effort (George & Jones, 1997, Williams & Karau, 1991). Research has also shown that there are individual differences that cause some to social loaf less than other (Bolin & Neuman, 2006; Morgeson, Reider, & Campion, 2005). A study on motivation found that people low on achievement motivation were more likely to social loaf (Hart, Karau, Stasson, & Kerr, 2004), and a study on gender and social loafing (Kugihara 1999) found that men were more likely to social loaf than women.

Jassawalla et al. (2009) found that a widely adopted measure of social loafing, George's (1992) 10-item interval scale, which measures social loafing as uni-dimensional, was not complex enough to totally capture the nature of the construct. Their study found that in fact social loafing was perceived by individuals as two distinct facets. The first social loafing behaviour, work quality has been described as two separate behaviours; doing less, which stems from a lack of willingness to perform and doing poorly, which stems from a lack of task ability or knowledge of the task (Jassawalla et al., 2009). The second, distractive behaviours, consist of members engaging in disruptive behaviours and not paying attention. Team members who engage in distracting

behaviours are engaging in what research calls counterproductive work behaviour (Spector & Fox, 2002). Counterproductive work behaviour is the "voluntary, potentially destructive or detrimental acts that hurt colleagues or organizations" (Spector & Fox, 2002, p. 270). These voluntary distracting behaviours are a result of a lack of willingness on the part of the individual to comply with group norms. Distracting behaviours can be anything from texting during group meetings to being loud and obnoxious while others are trying to work as a team.

These social loafing behaviours can also be classified as active versus passive. The element of doing less in work quality (poor) demonstrates that the team member is taking a passive approach, such as withholding performance (handing his or her part in late or not at all) or withdrawal from work (showing up late or not at all for meetings). Distracting behaviours on the other hand involve the team member actively engaging in counterproductive, delinquent and annoying behaviours (Spector & Fox, 2002).

The traditional definition of social loafing in teams, whether at the workplace or in a school setting, has been defined in the literature as a reduction in individual effort, both physical and mental, while working in a group to accomplish a task (George, 1992; Murphy, Wayne, Liden & Erdogan 2003). At first glance, engaging in distracting behaviours does not seem like a social loafing behaviour at all. The term "loafing" is synonymous with lazy or being idle. However, recent research on loafing (Jassawala et al., 2009) has found that students do in fact perceive distracters as 'loafers'. This can also be supported by research on contextual performance.

Individual performance in general can be broken down into two separate types: task performance and contextual performance. There has been an extensive amount of research on these two types of performance and how they affect organizations and more specifically teams within organizations (Conway, 1999; LePine, Hanson, Borman, & Motowidlo, 2000; Motowidlo & Van Scotter, 1994). Task performance can be defined as the job-specific behaviours and contextual performance can be defined as the non-job-specific behaviours that effect overall team effectiveness (Conway, 1999). Researchers have found that task performance is highly correlated to task ability and knowledge of the job (Hunter & Hunter, 1984). Contextual performance on the other hand has been shown to be correlated to individual personality characteristics such as work orientation, cooperativeness and locus of control (Borman, Penner, Allen, & Motowidlo, 2001; Morgeson et al., 2005).

Looking back at the definition of poor work quality, which is either doing less work or doing poor work, we can see how this relates to task performance. As a group member, an individual is expected to do certain tasks, such as a portion of the written work or research a specific topic. If someone is not doing his or her part or if he or she is doing it and the quality is so poor it needs to be redone by another group member, this member is not providing job specific behaviours to help his or her team. If someone is engaging in distracting behaviours, he or she is not providing the non-job-specific support, or contextual performance, needed to help the team prosper.

For any given individual working within a group, reduced task specific effort affects task performance while engaging in distracting or counterproductive work behaviours affects contextual performance. Basically, time and energy spent engaged in

distracting behaviours is time and energy not spent on either task or positive contextual behaviour. The same way a 'loafer' ends up with the same rewards as the rest of his or her group, a distracter would as well. This being said, it could be time to take a different approach at social loafing research and to consider "loafing" not only as a passive behaviour but as an active one as well. In addition, when measuring for social loafing behaviours it might be beneficial to include items to measure distracting behaviours, and not only lazy or unproductive behaviours.

Research by LePine et al. (2000) suggests that a team member's abilities will influence their level of task performance and that their personalities will influence their level of contextual performance. These researchers also propose that most of the time contextual performance behaviours can make up for both task performance and contextual performance in teams. This statement could be tied to Jassawalla et al.'s (2009) results, which found that if a team member is performing poorly, it will not affect the overall performance of the group because other members are willing to pick up the slack to save their own grades. This could be because they feel bad that the person cannot do it especially if they see that effort is being put forth. However if someone is engaging in distracting behaviours, it will affect the overall performance of the group because members cannot make up for time lost trying to get the team to refocus.

Peer Evaluations

The increase in teamwork in the classroom and in organizations has led to a greater use of multiple sources of evaluators (Funderberg & Levy 1997, Tornow 1993). Traditionally an individual's performance would be measured by a supervisor or by a teacher, however now that teamwork has become a huge part of the classroom and the

workplace, the need to have other sources of feedback has arisen. A peer evaluation, or assessment, is a process in which individuals evaluate the amount, level, value, worth, quality, or success of the products or outcomes of the other members of their team (Topping, 1998).

Business schools have increased the use of student group projects in the last 10 years (Aggarwal & O'Brien, 2008). The Association to Advance Collegiate Schools of Business (AACSB) requires not only that a teacher encourage group work but that students also acknowledge the importance of the learning experience and actively participate in team learning (AACSB, 2007). One of the major problems with group work is how to evaluate its members and their individual contributions (Aggarwal & O'Brien, 2008; Brutus & Donia, 2010). To mitigate this problem, more and more professors have implemented the use of peer evaluations to ensure individual members are held accountable for their inputs (Brooks & Ammons, 2003; Brutus & Donia, 2010). Moreover, the use of a peer evaluation system is important in order to really understand what took place throughout the process of the group project. Sometimes, the student contribution is not the same from each member (Williams, Beard, & Rymer, 1991), and giving the same grade to all team members (which is usually the case) might cause the stronger students to feel resentful (sucker effect) or send the message to slackers that they will do well (free rider effect).

Peer evaluations have been shown to have many positive effects such as promoting a sense of ownership, personal responsibility, and motivation for the evaluators (Topping, 1998). However, even though peer evaluations are necessary and sometimes positive, there are many negative consequences of having these in place.

Duffy et al. (2000) found that teams characterized by high levels of relationship conflict and task interdependence suffered the most. This same study examined the relationship of individual self-esteem and peer evaluations and found that those high is self-esteem were generally certain of their own correctness and were less likely to change their own opinions in conflict situations, to listen to others' point of view, to conform to the team's expectations, or to change their attitudes and behaviours simply to gain a positive peer evaluation from their peers. The presence of a peer evaluation system has also been found to positively affect dependability, attendance and punctuality, work quality, doing a fair share of work, and getting along (Paswan & Gollakota, 2004).

As an independent variable for this study, the peer evaluation system will be measured in two ways; both the team member's level of awareness of the system and his/her level of perceived importance of the system. It is important to distinguish between the two because it is possible that a student is fully aware that his or her performance will be evaluated by other group members however they simply do not care about it because they feel it is unimportant or irrelevant. For the purpose of this study, awareness of an evaluation would mean that the student is fully aware that there is a peer evaluation system and also understands its purpose. The student's perceived level of importance will indicate that he or she finds the peer evaluation system useful and feels that receiving feedback from peers is an essential part of the group process.

For over four decades, there has been a large body of research which highlights the importance of evaluation apprehension or anticipation on learning, dominant responses, and task performance (Cottrell, Wack, Sekerak, & Rittle, 1968; Paulus & Murdoch, 1971; Sanna & Shotland, 1990). A meta-analysis by Karau and Williams

(1993) showed that some researchers have defined social loafing as a loss of motivation in teams caused by reduced evaluation or identifiability (Harkins & Szymanski, 1989; Kerr & Bruun, 1983). They found support for the arguments that loafing occurs because, in most cases, individuals' inputs can only be evaluated in the coactive condition (performed as a team but individual efforts evaluated). In the collective condition (joint productivity would be evlautated) on the other hand, individual inputs are evaluated as one final output and so individual inputs are not being evaluated. Research has also suggested that making individuals' evaluate each other's inputs may be enough to eliminate social loafing altogether in many situations (Harkins & Jackson, 1985; Harkins & Szymanski, 1989)

Although there is an extensive amount of research on evaluation potential or awareness of evaluations, there seems to be a lack of research on the effects of an individual's perceived importance of an evaluation on his or her performance. However, similar research on user acceptance of peer evaluations (McEvoy & Buller, 1987; Chen & Tan, 2004; DeSanctis & Courtney, 1983) indicates that students would be more inclined to use the system and take it seriously. Presumably, if a student thinks the peer evaluation system is useful and important then he or she will be more inclined to work harder (in order to receive better feedback from peers).

Self-Monitoring

Self-Monitoring orientation (high vs. low) is a widely researched personality trait in the organizational behaviour literature (Day, Shleicher, Unckless, & Hiller, 2002; Miller & Cardy, 2000; Snyder, 1974). Individuals can either under or over perform at the

workplace or in teams simply because of differences in personality. According to Snyder's self-monitoring theory (1974), individuals differ in the extent to which they can control their expressive and self-presentational behaviour. High self-monitors (individuals who score high on a measure of self-monitoring) have an easier time reading others and figuring out what is expected of them. Low self-monitors on the other hand, are not necessarily less able but are less concerned with assessing the situation at hand. Low self-monitors behave in a way that they think is appropriate and not in a way they think others feel is appropriate (Snyder & Gangestad, 1986).

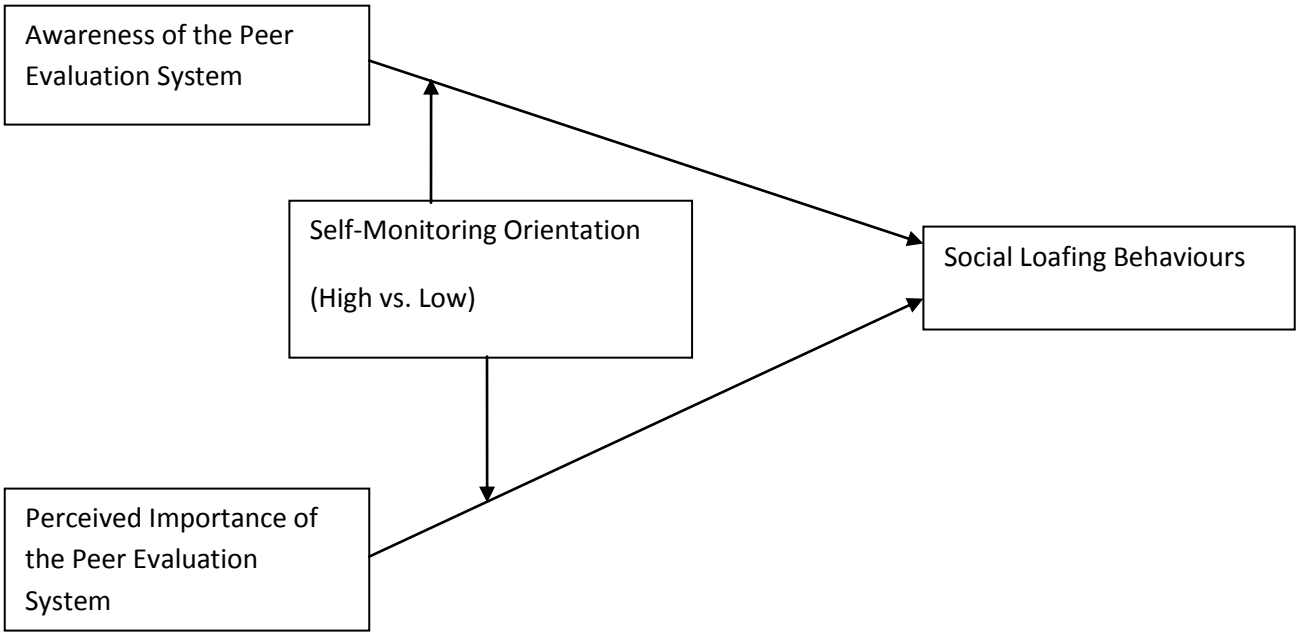
There are many factors that could moderate the relationship between how one perceives the peer evaluation system and whether he or she is perceived as a social loafer by other. External factors, such as the student's family life or outside commitments for example, can change the strength of such a relationship. For instance even if a student feels that the peer evaluations are very important, that same student could miss meetings or give in poor quality work because they are having problems at work or in their personal lives. Personality traits, such as extraversion and agreeableness, also come to mind. A student who does not feel the peer evaluations are important may be so friendly and outgoing that he or she is seen as an outstanding group member. Self-monitoring, a trait where individuals' "active construction of public selves to achieve social ends"(Gangestad & Snyder, 2000, p.546) stands out in this research on peer evaluations. Given the increase not only in teamwork but in multi-rater feedback, both in schools and at the workplace, there is a need to explore what type of relationship self-monitoring has with peer evaluation outcomes in a team project setting.

HYPOTHESES BUILDING

A great deal of past literature has been spent trying to understand the effects of performance evaluations specifically on an individual's task performance and motivation. A study by Shalley (1995) showed that expecting an evaluation had no negative effects on individual creativity. Jackson and Zedeck (1982) found evaluations had a positive impact on productivity when people expected a peer evaluation. In their study, Jackson and Zedeck (1982) found that both performance on a cognitive task and performance on a manual task were significantly affected by evaluative context. For performance on both manual and cognitive tasks, subjects performed best in the peer evaluation condition, worst in the compliance condition where they believed they would be punished for poor performance and intermediate in a control condition.

When performance levels are being judged by others, behaviours may be affected by the individual's apprehension about how other members of the team are going to evaluate his or her performance. Such apprehensions come about because the individual is concerned about whether the other team members will approve or disapprove of his or her performance. The present study aims to see if the anticipation of the peer evaluation system or the perceived importance of the peer evaluation system has an effect on individual loafing behaviours (as evaluated by their peers).

Figure 1.



Evaluation Awareness and Social Loafing Behaviours

A study by Paulus & Murdoch (1971) suggests that anticipated evaluation of performance produced a greater emission of dominant responses in individual performance than no anticipation of evaluation. Cottrell et al. (1968) found support for their hypothesis that the mechanism responsible for such audience effects is the learned anticipation of positive or negative outcomes. In other words, the presence of other group members has positive effects on individual performance only when their presence is a sign that the individual will be evaluated.

A study by Harackiewicz, Abrahams, & Wageman (1987) suggests that evaluative contingencies or "external communications about upcoming evaluations (p.1015)" do in fact influence the level of engagement put forth by an individual team member in two ways. With respect to task performance, individuals may take more pride in the quality of their work and try harder to do well on the task. As for contextual performance, the

anticipation of evaluation can affect an individual's motivation and involvement towards a task (willingness).

As previously stated, an individual's performance (Work Quality) is impacted by both his or her ability and willingness (motivation) to perform the task. Presumably, if an individual expects the evaluation by his or her peers, the motivation to try harder and to actually hand in assignment on time will be affected. We expect to find that individuals who anticipate or are highly aware about the peer evaluation system would provide better work quality and therefore not be seen as social loafers (as evaluated by their peers).

H1- Awareness of the peer evaluation system will have a negative relationship with Social Loafing (as perceived by their peers)

Perceived Importance of Evaluation and Social Loafing Behaviours

There is a surprising lack of research covering the perceived importance of a peer evaluation and how this affects work performance and/or social loafing behaviours. Several studies have focused on expectancy theory (reference by Vroom) in order to show that the user's perceived importance or acceptance of the system does in fact result in an increased intent to use it (Chen & Tan, 2004; DeSanctis & Courtney, 1983). Although there is little evidence on perceived importance of peer evaluations and its effects on performance, there is enough to suggest that perhaps student's who perceive the peer evaluation system as very important will take it more seriously and therefore engage in less social loafing behaviours. Previous studies have shown that the influence of feedback on performance was partially mediated by the individual's perceived importance of the feedback (Earley, 1986). We expect to find that individuals who feel

that the peer evaluation system is important would provide better work quality and therefore not be seen as social loafers (as evaluated by their peers).

H2- Perceived importance of the peer evaluation system will have a negative relationship with Social Loafing (as perceived by their peers)

Self-Monitoring as a Moderator

With the sudden shift from single rater to multiple raters including peers, the question of whether individuals with well-developed abilities to modify their self-presentation in different situations and for different audiences will fare better in terms of rating outcomes than those who lack such abilities (Miller & Cardy, 2000). This thesis examines this question by exploring self-monitoring orientation. If a student is a high self-monitor, then even if he or she feels the peer evaluation is unimportant or if he or she was not aware of it, he or she might still get good feedback and not be seen as a social loafer because he or she was simply altering his behaviour to make people like him or her. Would the students with well-developed abilities to modify his or her behaviour in different situations and for different group members receive better feedback than one who lack these same abilities?

Palmer, Welker & Giacalone (1993) found that task performance effort is directly related to the self-presentational concerns of an individual within a team. In addition, many researchers have found links between differences in self-monitoring orientation and job outcomes such as job performance, leadership, and impression management (Day et al., 2002; Mehra, Kilduff, & Brass, 2001; Snyder, 1974). Day et al. (2002) found that

high self-monitors tend to receive better performance ratings than low self-monitors and are more likely to emerge as leaders.

We expect that high self-monitors will be more inclined to act the part or put on a show in order to attain a good evaluation from their peers even if they feel the peer evaluations are unimportant or they were unaware of it.

H3- Self monitoring orientation will moderate the relationship between perceived importance of the peer evaluation system and social loafing behaviors such that the relationship will be stronger for high self monitors than it will be for low self-monitors.

H4- Self monitoring orientation will moderate the relationship between awareness of the peer evaluation system and social loafing behaviors such that the relationship will be stronger for high self monitors than it will be for low self-monitors.

RESEARCH METHODOLOGY

Procedure

Data was collected on two separate occasions. The first took place during the last week of classes in the winter semester; the researcher had contacted the professors in advance for 20 minutes of class time. The choice of courses attended was carefully thought out in order to ensure that no student filled out the survey twice. Students were given a brief introduction about the research (see appendix A) and asked to fill out a paper and pencil survey (see appendix B). The participants were informed of the purpose of the study and their rights as research participants before they agreed to participate (see appendix C). They were asked to answer questions which would measure their level of perceived importance of the peer evaluation system as well as their knowledge or level of anticipation of the system. Additionally they were asked to answer questions to assess

their self-monitoring orientation. Students were asked to provide their gender, number of years in program, experience with the system and whether it was positive or negative, if they chose their own groups for the purpose of the project and their student ID in order to later link these responses to their online responses. They were assured both verbally and in writing that their student ID's would be used for nothing other than linking these responses.

The second round of data collection was conducted online, at the same time as the students evaluated their team members using the University's online peer evaluation system. A detailed description of the system is provided by Brutus & Donia (2010). After evaluating their team members they were prompted to answer questions concerning the social loafing behaviours of their members (see appendix D). Although most business students are asked to complete the online peer evaluation system, only the results of those who filled out the study's paper and pencil survey were delivered electronically to the thesis' supervisor. A list of student ID's was compiled from the first round of in-class data collection and sent to the online system's administrator. These two sets of data were linked into one large data set ready to be analysed. The data collection protocol was examined and approved by the Ethics Review Committee of the University.

Sample

491 undergraduate students from a large business school were asked to participate in this study on a voluntary basis. For the purpose of this study, participants were chosen based on two criteria; they were part of a course that required a group project be completed throughout the term, and they were expected to use the online peer evaluation system to rate their peers at the end of the semester.

A total of 491 students participated in the first round of data collection which took place in the classroom. Of these 491, 43 did not include their student ID in the first data collection phase and therefore were removed from the analysis because we could not link their survey answers to their electronic answers. The demographics of these 43 unknown participants are as follows; 20 male and 23 female and number of years in their program ranged from 1 to 5 with a mean of 1.94. When asked how many times, if any, they had used the system before, the results ranged from 0 to 20 (N=43, M=3.49, SD=3.73).

Of the 448 students that did include their student ID there were 220 males and 228 females, number of years in their program ranged from 0 to 11 with a mean of 1.58. When asked how many times, if any, they had used the system before, the results ranged from 0 to 30 (N=448, M=2.74, SD=2.75). When asked the following "I received positive feedback from my peers last time I used the Peer Evaluation" the mean score reported on a 5 point Likert scale was 3.81 (N=448, SD=1.04). Finally, 71 students reported choosing their own groups while the remaining 377 reported that they did not have the option to form their own groups for the purpose of the semester's project.

In the second round of data, participants were asked to rate their peers. Of the 448 student ID's, we received 425 that were evaluated online by their peers.

Measures

Independent Variables

You first need to describe the scale before talking about the EFA. To assess whether the 8 items developed for the nature of this study generated the factor structure (perceived importance and awareness of the peer evaluation system), an exploratory

factor analysis was conducted using the maximum likelihood method and varimax rotation. The break in the scree plot, extracted eigenvalues, and percentage of variance explained all suggested a two-factor solution (KMO = .69, $\chi 2$ (15) = 812.80, $p < .001$). All items loaded on their respective factors, except for 2 items measuring awareness. In particular, the 2 items had communalities less than 0.3 and were therefore removed. Furthermore, no cross loadings were identified.

Two items measured awareness of the peer evaluation system to examine whether students were fully aware that they would be evaluated by their peers. The items were "I thought frequently about the fact that I was going to be evaluated by my peers at the end of the semester" and "During the semester, I forgot about the peer evaluation system". Responses were based on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The correlation between these two items was .52.

Four items measured perceived importance of the peer evaluation system to examine whether students felt the system was important and useful. Sample items include "The peer evaluation system is an important part of the group project" and "I am interested in knowing how my peers perceive me". Responses were based on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A test of reliability showed that the internal consistency reliability for this measure was .82.

Dependent Variables

Social Loafing Behaviours

In order to measure the extent to which a student was seen as engaging in social loafing behaviours, team members were asked to answer questions at the end of the

online peer evaluation process. A 6-item scale to measure work quality was adapted from Jassawalla et al (2009). To assess whether the 6 items developed for the nature of this study generated the factor structure (Work Quality), an exploratory factor analysis was conducted using the maximum likelihood method and varimax rotation. The break in the scree plot, extracted eigenvalues, and percentage of variance explained all suggested a two-factor solution (KMO = .73, $\chi 2$ (15) = 792.11, $p < .001$). Four items loaded on one factor and two items loaded on another. The two items were dropped because the correlation between the two was very low, .46. In addition there were cross loadings for both of these items.

Four items measured work quality to examine whether students were perceived as social loafers. Sample items include "Overall, this member came well-prepared for the team meetings" and "Overall, this member did not have the required skills to complete the assigned work". Responses were based on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). High scores on this measure indicate poor work quality and low scores indicate good work quality. A test of reliability showed that the internal consistency reliability for this measure was .80.

Moderator

Self-Monitoring

There has been much debate and controversy surrounding the validity of the self-monitoring scale originally designed in 1974 by Snyder. Its original form consisted of 25 items and used a true or false response format. Another widely accepted revised Self-Monitoring Scale built in 1986 by Snyder & Gangestad consists of 18 items and also uses

the true-false format. The proposed study will employ the 13-item scale redesigned by Lennox and Wolfe (1984). A 6-point Likert response format was used, with high scores indicating high self-monitoring: 5 = certainly, always true; 4 = generally true; 3 = somewhat true, but with exception; 2 =somewhat false, but with exception; 1 = generally false; 0 = certainly, always false (as indicated in the original study, these weights were reversed for negatively worded items). Sample items included "I guess I put on a show to impress or entertain others" and "I have trouble changing my behaviour to suit different people and different situations". A retest of reliability showed that the internal consistency reliability for the measure in this study was 0.84.

Control Variables

During the first round of data collection that took place in the classroom, students were also asked to answer open ended questions such as how many times, if any, they had used the system before, their gender, how many years they had been in their program and whether or not they had the option to form their own groups. They were also asked to respond on a 5-point Likert scale if they had received positive feedback from their peers last time they used the Peer Evaluation system.

RESULTS

The results of the statistical analyses are reported below. To begin with, a detailed explanation of how the data was handled and organized will be presented. Secondly, results from a verification of inter-rater agreement will be discussed. Finally, findings relating to the relationships between the main variables will be examined.

Data Preparation

As previously mentioned, data was collected at 2 separate times. The first in-class collection lead to our sample of 448 completed and usable surveys. Once the peer evaluation period had closed, a report was received with the peer evaluations. The data were examined in order to remove any response errors. For example some students had responded to every question with either 1's or 7's (not taking into account the reversed worded questions). These were removed as well as any evaluation that included blanks (meaning they answered 1 or few of the 6 questions about their peers).

After the cleanup, there were evaluations for 425 of these students. In total there were 1006 evaluations of our sample of 425 students. Of these 425 sets of evaluations, 125 were rated by only 1 other peer, 124 were rated by 2 other peers, 125 were rated by 3 other peers, 48 were rated by 4 other peers and only 3 were rated by 5 peers. 31 of these were part of 2 groups and 3 were part of 3 groups. In order to satisfy the assumption of independent data, 1 of the students groups was chosen at random to represent the student's evaluation. The final sample for the study is 394 students who filled out the self report survey and who were evaluated by their peers using the peer evaluation system.

Inter-rater Agreement (Rwg)

When working with ratings from more than one judge (or peer) it is important to justify aggregating these scores in order to use their average rating. Inter-rater agreement (IRA) has been defined as an absolute consensus in scores furnished by multiple judges for one or more targets (LeBreton & Senter, 2008; James, Demaree, & Wolf, 1993). Estimates of IRA such as the RWG are calculated to ensure that scores furnished by judges are interchangeable or identical in terms of their absolute value. In the case where

only one target, in this case the student, is being assessed, the empirical support needed to justify aggregation may be acquired by an estimate of IRA alone and estimates of inter-rater reliability (IRR) are not necessary (Chan, 1998, LeBreton & Senter, 2008).

For the purpose of this research the estimate of IRA we used is a well established methodology developed by James, Demaree, and Wolf (1984) which is the multi-item rwg (j) index. This index defines inter-rater agreement in terms of the proportional reduction in error variance. When rwg (j) = 1.0 there is a complete agreement and all of the peers gave the same rating to the student in question. Rwg (j) was estimated for the measure of work quality. The rwg for the 4 items is 0.67 which, according to the literature, represents a moderate score.

Although the maximum estimate of rwg (j) should be 1.0, it is not abnormal to observe out-of-range values. This happens when the observed variance exceeds the expected variance for a random response null distribution (LeBreton & Senter, 2008). For the purpose of this thesis, we randomly checked 20 out-of-range values and the case was always that the student was rated by 2 other peers, one gave high ratings and one gave low ratings. This is most probably due to personal feelings and differences between the team members (i.e., some were friends before; some disliked each other and were forced to work together). As suggested in the literature, the pattern of rwg (j) estimates was examined and a judgment was made to go ahead and total the evaluations made by peers for one student and then average them to obtain one score for each measure.

Correlations and Descriptive statistics

Preliminary analyses were conducted to gain an overall perspective of the data collected. The data was inspected for any errors (such as missing data), outliers, or other

problems in the distribution or collection of the data. Assumptions for linearity, normality and collinearity were tested prior to the main regression analyses. Correlations among all variables were also run to detect significance of relationships (see table 1). The means and standard deviations for the constructs were computed. The results are also presented in Table 1.

Table 1- Descriptive Statistics

	M	SD	1	2	3	4	5	6	7	8
1. Self Monitoring	2.57	0.56								
2. Perceived Importance of the PES	3.67	0.76	-.14**							
3. Awareness of the PES	3.1	1.01	-.15**	.27**						
4. Work Quality	1.87	0.94	0.05	-0.07	.15**					
5. Number of Uses with PES	2.69	2.81	-0.07	0.04	0.05	0.05				
6. Previous Positive Experience with PES	3.78	1.06	-.13*	.30**	.11*	-.10*	.16**			
7. Years in Program	1.58	1	0	0.08	0.07	0.06	.32**	.11*		
8. Gender	1.51	0.51	0	0.09	.11*	0	0	-0.02	0.04	
9. Chose Groups	1.83	0.37	-.14**	.11*	0.09	-.13*	0	0.06	-0.02	.13**

*Note. N = 394. *p < .05; **p < 01.*

Tests of the Hypotheses

A regression model was generated for each of the hypotheses in order to determine the directed dependencies among the main variables: perceived importance, evaluation awareness, self monitoring orientation and social loafing. Independent variables were entered either simultaneously into the regression model in order to test their separate effect on the dependent variable (hypotheses 1 and 2), or in a stepwise fashion in order to assess the moderating effect of self-monitoring orientation on the relationship between the main independent and dependent variables (hypotheses 3 and 4).

For all hypotheses the following variables were entered as control variables: Previous experience with the system, Positive experience with the system (on a scale of 1 to 7, 1 being extremely unsatisfied), Years in Program (YIP), Gender and Group Choice (yes or no).

Hypothesis 1 was not supported but the opposite result was found to be significant. The regression showed that level of evaluation awareness and work quality were positively related, $\beta = .16$, $R^2 = .06$, $F\ (6, 387) = 4.12$, $p < .01$; the student's who reported higher scores for evaluation awareness of the peer evaluation system received higher scores work quality by their peers (higher scores on the work quality scale indicate poor work quality).

The regression for hypothesis 2 showed a poor fit, explaining only 3% of the variance in work quality, but the overall relationship was statistically significant, $R^2 = .03$, $F\ (6, 387) = 2.23$, $p < .05$. With other variables held constant, perceived importance of the peer evaluation system was not significantly related to work quality (as perceived by team members), $\beta = -.04$, $p > .05$ and therefore hypothesis 2 was not supported.

For Hypothesis 3 and 4, centered polynomials were computed for both independent variables; Perceived Importance and Evaluation Awareness along with a centered variable for the interaction between the moderator, Self-Monitoring Orientation, and each independent variable in order to reduce possible multicollinearity among variables. These centered polynomials were obtained by subtracting the mean scores on each variable from each data point for this same variable. The interaction effects were generated by multiplying the centered variables for Perceived Importance and Evaluation Awareness with the moderator, Self Monitoring.

Hypothesis 3 testing the moderating effect of self monitoring orientation on the relationship between perceived importance of the peer evaluation system and work quality was not supported. Analyses revealed no significant interaction between perceived importance of the peer evaluation system and self monitoring in the prediction of work quality, $\beta = -.15$, *ns*.

Hypothesis 4 testing the moderating effect of self monitoring orientation on the relationship between awareness of the peer evaluation system and work quality was not supported. Analyses revealed no significant interaction between awareness of the peer evaluation system and Self Monitoring in the prediction of work quality, $\beta = .07$, *ns*.

DISCUSSION

The objective of this study was to establish a relationship between a student's perception of the peer evaluation system and his or her work quality as a team member (as evaluated by their peers). More specifically, did students who felt that the peer evaluation system was important or, were more aware that they would be evaluated by their peers; receive a more favorable evaluation from team members with regards to work quality (task performance and contextual performance). Finally, a student's self-monitoring orientation, or ability to control their behaviours and actions was explored as a moderator for the aforementioned relationships.

Perceptions of the Peer evaluations and Social loafing Behaviours

The study failed to detect a negative relationship between perceptions of the peer evaluation system on social loafing behaviours of individual team members. In other

words, whether students knew that their peers would be evaluating them had little effect on peer feedback regarding either the quality of their work, or the level of engagement put forth. Even if the individual was aware of the evaluation, the actual ability to perform the task well (as evaluated by his or her team members) was not affected. If someone simply lacks the ability to do a task such as researching a topic or writing a report, knowing he or she is being evaluated might just make him or her more nervous and stressed.

Previous research has shown that anticipation or awareness of evaluation affects an individual's motivation and involvement towards a task in a positive way (Harackiewicz et al., 1987; Jackson & Zedeck, 1982; Shalley, 1995). However, research into the effects on an individual's behaviour when subjected to peer performance evaluation or, the manner in which the peer evaluation process is perceived by the evaluator(s) is virtually non-existent.

Contrary to expectations, the level of evaluation awareness and perceived work quality were negatively related; the students who reported higher scores for evaluation awareness of the peer evaluation system were more likely to be perceived by their peers as engaging in social loafing behaviours, as not being able to complete the work, and as not coming prepared to the meetings. This is surprising and could be attributed to the student's concern about his or her evaluation causing his or her focus to shift away from the task itself causing a distraction (Wine, 1971; Cottrell, 1972). Wine's argument (1971) has been labeled an 'internal distraction hypothesis' and is similar to the classic explanation by Cottrell (1972) for debilitated performance in the presence of an audience. Cottrell (1972) argues that shifts of attention from the task are due to other people being

present and possibly evaluating. Wine (1971) on the other hand argues that attention to oneself causes the interference and shift from the task. Another reason could simply be that the student, even though he or she is fully aware of the evaluation, has little care or, feels that the feedback is insignificant and continues to engage in these social loafing behaviours. Finally, this could be attributed to causal issues, a major limitation to this study. Perhaps it was the students who were social loafing that reacted strongest to the awareness questions on the survey.

Even more surprising was the fact that a student's level of perceived importance of the peer evaluation system showed no relationship with their work quality (as perceived by their peers). Due to the lack of research dedicated to the study of perceived importance relative to established forms of inner-group evaluation peer or otherwise, it was impossible to compare these results with previous findings.

There are certain situations in which a person's performance awareness is heightened. This situation has been described as a call for action (Sarason & Sarason, 1981). According to the literature, a call for action is imposed on someone for one of two different reasons; situational demands or personal preoccupations (i.e. if a student feels that anything below an A is a failure). It is possible that a student will perform well even if he or she is unaware or feel the peer evaluation system is unimportant because of situational demands. Task assignment (such as a group project), could be considered a call for action and the need to excel or take charge is unaffected by the individual's perception of the evaluations.

Self-monitoring and Social Loafing Behaviours

Based on established literature, it was expected that students who were high self-monitors, would receive better feedback from their peers regardless of their level of perceived importance or awareness of the evaluation system. Self-monitoring orientation failed to moderate the relationship between level of evaluation awareness or perceived importance of the peer evaluation system and any of the social loafing behaviours.

An individual's personality, a construct very closely related to individual differences, has been shown to determine the level of a person's job performance and ability to work in teams (Barrick & Mount, 1991, Barrick, Stewart, Neubert, Mount 1998, Morgeson, Reider, & Campion, 2005). In a meta-analysis by Barrick and Mount (1991), results showed that conscientiousness was a valid predictor of job and training proficiency as well as personnel data such as attendance and punctuality.

According to self-monitoring theory, self-monitoring orientation affects the extent to which an individual is willing and able to monitor their behaviours and intentions in social situations (Gangestad & Snyder, 2000; Mehra et al., 2001). The link between self-monitoring orientation and performance evaluations is important because attention to social cues for the purpose of self-presentation is pervasive in workplace and classroom teams (Baumeister & Cairns, 1992).

Practical Implications

Even though the proposed relationships between perceptions of the peer evaluation system, social loafing behaviours and self monitoring orientation were found to be insignificant, the findings from this study highlights the significance of student perceptions of peer evaluation systems, filling the gap in the available related literature.

This study's findings relative to students' awareness of the system are interesting. The students who reported being more aware of the upcoming evaluation were evaluated as poor performers or social loafers. This is possibly because when they were asked if they knew they would be evaluated by their peers, something clicked and they realised that they were goofing off or not pulling their weight. This being said, if teachers and managers go out of their way to ensure that teammates are really aware and understand the peer evaluation process, the quality of their work might actually improve.

Administrators wishing to introduce any peer evaluation process should consider that the personality traits of the team members, specifically self-monitoring orientation, as well as the perceptions they have on the process can affect the feedback given by peers as well as the actual quality of their work. It is important to examine personal or organizational factors that may moderate responses to multisource feedback.

Strengths and Limitations

Although the hypotheses proposed in this study were not supported, there are still several strengths to note. First, the dependent and independent variables were measured at two separate times. Secondly, although self-reports were used, data was collected from two sources: the student and the student's teammates. Single source bias is a common method variance, which is an overlapping variability due to data being collected from a single source (Campbell & Fiske, 1959). Collecting data from people can be inaccurate and unreliable especially when it comes to forming perceptions (Dipboye & Flanagan, 1979; Mitchell, 1985). This being said, gathering data from multiple sources strengthens the study. Finally, the study took place in an actual real task setting as opposed to a simulation. This way we are more likely to get authentic reactions from participants.

There are a number of factors that could have contributed to the inconclusive results of this study; first and foremost is the design of the study itself. Ideally, the effect of the peer evaluation system on social loafing behaviours would have been examined in an experimental environment. The experiment would include one section of students knowing they would have to use the peer evaluation system at the end of the group project and another control section of students where the groups would not know they would be using the peer evaluation system. The resulting variance in social loafing behaviours could then be directly attributed to the implementation of a peer evaluation system. Instead, the current study used a correlation design where the use of a peer evaluation system (yes or no) became the student's perceptions of the peer evaluation system and how these perceptions affected social loafing behaviours. The use of a correlation design often brings about causal issues, meaning we do not know what came first, the student's poor performance or their perceptions of the peer evaluation system (awareness and perceived importance).

Due to the lack of previous research on perceptions of peer evaluation systems, the measures for these variables were created specifically for the purpose of this study. A new scale was developed to measure the independent variables, level of perceived importance and evaluation awareness, as well as the dependent variable, work quality. All of the internal consistency reliabilities were checked for the measures; however, reliability is a necessary but not sufficient characteristic of a measure. Even if a measure produces consistent findings, it cannot be depended upon to measure exactly what it was intended to measure. The validity of the measures in the study is therefore questionable.

It is also important to note that the intent of this study was not to measure the student's actual work quality but the quality of work as perceived by his or her peers. Even though the participants were assured anonymity, it is possible that the results may have been biased considering many of the students that participated in this study could have been friends, or reluctant to provide negative feedback. Once again, a proper experimental environment would surely have produced a more favorable outcome.

The subject group may also have contributed to the limitations of this study. The research was conducted among undergraduate students so the results may not reflect real-life scenarios external to the educational environment. Moreover, students were perhaps unclear as to the exact purpose of the peer evaluation process and that their feedback was solely for evaluation purposes. Within the work environment, peer or multi-source evaluations are used for many reasons; developmental (career/skill enhancement) and administrative (career advancement and pay increases).

Future Research

The topic of peer evaluations deserves further research considering the huge increase in teams not only in the classroom but especially in the workplace. Studies have found that practice in peer evaluations could facilitate subsequent employee evaluation skills (Marcoulides & Simkin, 1991). Peer evaluations have been known to develop many social and transferable skills, communication skills and negotiation skills (Riley, 1995). More specifically, it is important to continue research on student or employee perceptions of peer or multi source evaluations. There is a surprising lack of research (especially current) which focuses on the effects of student perceptions of peer evaluation systems and their level of knowledge or awareness of the system on predicting performance and

behaviour.

Despite there being no significant results between the main variables in this study, it would be worth re-exploring these same relationships with stronger and better developed measures. In addition, using an experimental design where the independent variable 'Use of the Peer Evaluation System' could be manipulated to better assess the effects of the presence and/or use of such a system. Due to the scope and nature of this research project this design was not possible given that at this particular university, a large majority of the undergraduate business students use the peer evaluation system in their courses.

The recent exploratory study by Jassawalla et al. (2009) showed that in fact students do perceive social loafing as two distinct facets. In addition, they argue that distracting behaviours are much more detrimental to group project outcomes than is poor quality work. If a student distracts, it is harder to make up for time lost, if they give in poor quality work, the other members can simply make up for it. Lepine et al. (2000) also found that contextual performance is more beneficial in teamwork than is individual task performance. Future studies should explore the links between distracting behaviour and contextual performance and poor work quality and task performance. Moreover there is a need to really understand the difference between these two distinct facets of social loafing as well as their antecedents and consequences.

The problem of social loafing in classroom teams has been explored for decades however it is recently becoming more complex. The focus in the literature has been on the causes and consequences of social loafing. There is little or no research which examines the relationship between evaluative context and social loafing. Confirmatory

evidence from a variety of research designs and studies is needed, preferably across different organization and educational institutions.

Finally, although the results of this study failed to indicate that the personality trait of self-monitoring does have an effect on work quality; previous research has found support for the effects of self-monitoring orientation on other work-related outcomes (Miller & Cardy, 2000). This being said, self-monitoring should be considered an important moderator factor when examining the relationship between personality and performance.

CONCLUSION

The purpose of this study was to examine the relationship between student perceptions of the peer evaluation system and social loafing behaviours. The study was conducted in a university environment and the findings were inconclusive. By improving the methodology and design of this study, researchers may be able to build on this study to further explore the relations between the main variables of interest. There is a need to examine the effects of student or employee perceptions of evaluation processes on the quality of their work, and their behaviours as teammates. Given that there is very little research that has examined the moderating influences of self-monitoring; this appears to be a valuable area for future research examining relationships between individual personality and behaviour.

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APPENDICES

Appendix A: Participant Recruitment Letter

Dear fellow students,

I am a student in the MScA program of JMSB and I am seeking your voluntary participation for a research project. I am conducting a study concerning the use of the peer evaluation system here at JMSB. More specifically, I am interested to see how this system is related to certain social loafing behaviours. The survey will take approximately 10 minutes to complete.

Please note that the information that you provide will not be disclosed to any third party and the research results will only be used for research purposes and published in my Master's thesis.

Your time is greatly appreciated.

Amanda Nicholson

Appendix B: Survey (Self-Report, In class data collection)

Concordia University
John Molson School of Business

Concordia University

Dear fellow students,

I am a student in the MScA program of JMSB and I am seeking your voluntary participation for a research project. I am conducting a study concerning the use of the peer evaluation system here at JMSB. More specifically, I am interested to see how this system is related to certain social loafing behaviors. The survey will take approximately 10 minutes to complete.

Please note that the information you provide will not be disclosed to any third party and the research results will only be used for research purposes and published in my Master's thesis.

Your time is greatly appreciated.

Amanda Nicholson

PART 1

Please indicate your agreement with each of the following statements by placing a ✓ in the scale at the right.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. In my opinion the Peer Evaluation System is very useful.	○	○	○	○	○
2. The Peer Evaluation System is an important part of the group project.	○	○	○	○	○
3. I am interested in knowing how my peers perceived me.	○	○	○	○	○
4. The results of the PES are very important to me.	○	○	○	○	○

PART 2

Please indicate your agreement with each of the following statements by placing a ✓ in the scale at the right.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I am fully aware that I will be evaluated by my peers at the end of this semester.	○	○	○	○	○
2. I thought frequently about the fact that I was going to be evaluated by my peers at the end of the semester.	○	○	○	○	○
3. During the semester, I forgot about the Peer Evaluation System.	○	○	○	○	○
4. I am well informed about the Peer Evaluation System.	○	○	○	○	○

PART 3

Please indicate your agreement with each of the following statements by placing a ✓ in the scale at the right.	Certainly, Always True	Generally True	Somewhat True, but with Exception	Somewhat False, but with Exception	Generally False	Certainly, Always False
1. In social situations, I have the ability to alter my behavior if I feel that something else is called for.	○	○	○	○	○	○
2. I have the ability to control the way I come across to people, depending on the impression I wish to give them.	○	○	○	○	○	○
3. When I feel that the image I am portraying is not working, I can readily change it to something that does.	○	○	○	○	○	○
4. I have trouble changing my behavior to suit different people and different situations.	○	○	○	○	○	○
5. I have found that I can adjust my behavior to meet the requirements of any situation I find myself in.	○	○	○	○	○	○
6. Even when it might be to my advantage, I have difficulty putting up a good front.	○	○	○	○	○	○
7. Once I know what the situation calls for, it is easy for me to regulate my actions accordingly.	○	○	○	○	○	○

Please see over.

PART 3 *cont'd.*

Please indicate your agreement with each of the following statements by placing a ✓ in the scale at the right.	Certainly, Always True	Generally True	Somewhat True, but with Exception	Somewhat False, but with Exception	Generally False	Certainly, Always False
8. I am often able to read people's true emotions correctly through their eyes.	○	○	○	○	○	○
9. In conversations, I am sensitive to even the slightest change in the facial expression of the person I am conversing with.	○	○	○	○	○	○
10. My powers of intuition are quite good when it comes to understanding others' emotions and motives.	○	○	○	○	○	○
11. I can usually tell when others consider a joke to be in bad taste even though they may laugh convincingly.	○	○	○	○	○	○
12. I can usually tell when I have said something inappropriate by reading it in the listener's eyes.	○	○	○	○	○	○
13. If someone is lying to me, I usually know it at once from that person's manner of expression.	○	○	○	○	○	○

PART 4

1. Have you ever used the Peer Evaluation System before?

   ☐ No ☐ Yes

   If yes, how many times? _____

Please indicate your agreement with the following statement by placing a ✓ in the scale at the right.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
2. I received positive feedback from my peers last time I used the Peer Evaluation System (PES).	○	○	○	○	○

3. How many years have you been in your program? _____

4. I am

   ☐ Male ☐ Female

5. Did you form your own group for the purpose of this project?

   ☐ No ☐ Yes

Thank you for taking the time to participate in this study. The second part will take place online after you complete the peer evaluations for your team members.

If at any time you have questions or concerns about the research you just participated in, do not hesitate to contact me at a_nich@jmsb.concordia.ca

Please do not forget to complete the online Peer Evaluation System at the end of the semester!

Thank you again.

Amanda Nicholson

The following information is only needed to match your paper survey reponses with your online responses. If for whatever reason you choose not to include your student ID, please hand in the survey without it. Your Student ID will remain confidential at all times and will ONLY be used for research purposes. It will not be disclosed to any third parties.

Student ID #: _____

Appendix C: Consent Form

CONSENT TO PARTICIPATE IN RESEARCH PROJECT

Effects of evaluation on individual social loafing behaviours

This is to state that I agree to participate in a research project being conducted by Dr. Stephane Brutus and Amanda Nicholson of the MScA program here at Concordia University.

Contact Information:
Research Student: Amanda Nicholson, a_nich@jmsb.concordia.ca
Supervising Faculty member: Dr. Stephane Brutus, brutus@jmsb.concordia.ca , 514-848-2424

A. PURPOSE

I have been informed that the purpose of the research is to examine the relationship between the peer evaluation system and individual social loafing behaviours.

B. PROCEDURES

The study will be conducted at John Molson School of Business at Concordia University. Participation in this study requires filling out a survey questionnaire, which should take about 10 minutes. The questions asked focus on the efforts and behaviours of your group members. If at any time the questions asked make you feel uncomfortable, you should exercise your right to discontinue participation. **Participation in this study is completely anonymous**: all data collected will be coded and stored without any connection whatsoever to the identity of any participant. Please note that due to the anonymity of your data, once you hand in your survey it will be impossible to withdraw from the research study.

C. RISKS AND BENEFITS

There is no risks of participation. Benefits include the option to receive the findings of the study as well as contributing to knowledge creation of social loafing behaviours.

D. CONDITIONS OF PARTICIPATION

- I understand that I am free to withdraw my consent and discontinue my participation at any time prior to submitting my results without negative consequences.

- I understand that my participation in this study is **completely anonymous** (i.e. neither the researcher nor anyone else will ever know my identity).

- I understand that the data from this study will be published in a Master's Thesis.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.

NAME (please print)

_____

SIGNATURE

_____

If at any time you have questions about your rights as a research participant, please contact please contact the Ethics and Compliance Advisor of Concordia University at, Tel: 514-848-2424 ext: 7481 or ethics@alcor.concordia.ca

Appendix D: Questions added to Online Peer Evaluation System to rate Peers

Overall, this member came well-prepared for the team meetings.

Overall, this member did not have the ability to complete his/her assigned parts.

Overall, this member created distractions during team meetings (e.g., engaging in side conversations, surfing the net, etc.).

Overall, this member contributed very little to the project.

Overall, this member helped team members focus during meetings.

Overall, this member did not have the required skills to complete the assigned work.

* All questions were based on a 7-point Likert Scale (1=Strongly Disagree to 7=Strongly Agree)